



5V3

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FULL-WAVE VACUUM RECTIFIER

GENERAL DATA

Electrical:

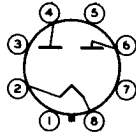
Filament, Coated:

Voltage (AC or DC)	5	volts
Current	3.8	amp

Mechanical:

Operating Position.	Vertical, or Horizontal with pins 2 and 4 in vertical plane
Maximum Overall Length.	4-5/8"
Maximum Seated Length	4-1/16"
Diameter.	1.438" to 1.562"
Bulb.	T12
Base.	Short Medium-Shell Octal 8-Pin with External Barriers, Style B (JEDEC Group 1, No. B8-118)
Basing Designation for BOTTOM VIEW.	5T

- Pin 1 - No Connection
- Pin 2 - Filament
- Pin 3 - Same as Pin 1
- Pin 4 - Plate No. 2



- Pin 5 - Same as Pin 1
- Pin 6 - Plate No. 1
- Pin 7 - Same as Pin 1
- Pin 8 - Filament

FULL-WAVE RECTIFIER

Maximum Ratings, Design-Center Values:

For power-supply frequencies of 25 to 1000 cps

PEAK INVERSE PLATE VOLTAGE	1400 max.	volts
AC PLATE SUPPLY VOLTAGE PER PLATE (RMS)		
(See Rating Chart I)	500 max.	volts
STEADY-STATE PLATE CURRENT PER PLATE		
(See Rating Chart II)	1.2 max.	amp
TRANSIENT PEAK PLATE CURRENT PER PLATE		
(See Rating Chart III)	5.5 max.	amp
DC OUTPUT CURRENT.	See Rating Chart I	

Typical Operation:

	With capacitor input to filter		With choke input to filter		
AC Plate-to-Plate Supply Voltage (RMS) ^a	600	850	1000		volts
Filter-Input Capacitor40	.40	-		μf
Filter-Input Choke	-	-	10		henries
Total Effective Plate Supply Impedance Per Plate.	24	56	-		ohms
DC Output Voltage at input to filter.	285	430	385		volts
DC Output Current.	380	350	350		ma

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Characteristics:

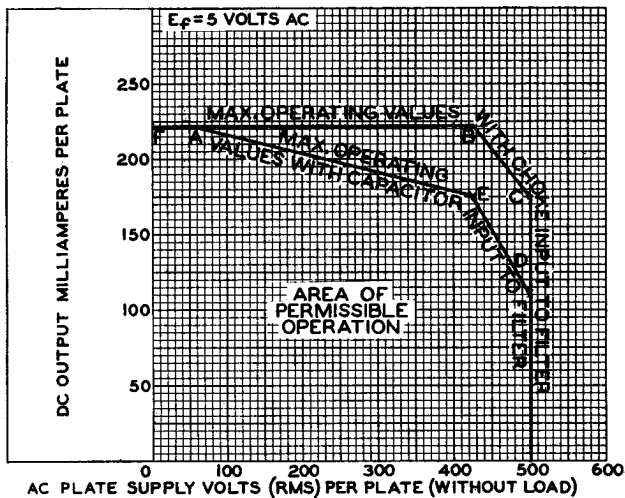
Tube-Voltage Drop for plate ma. = 350 (Per plate). 47 volts

▲ AC plate supply voltage is measured without load.

10-59

DATA

RATING CHART I





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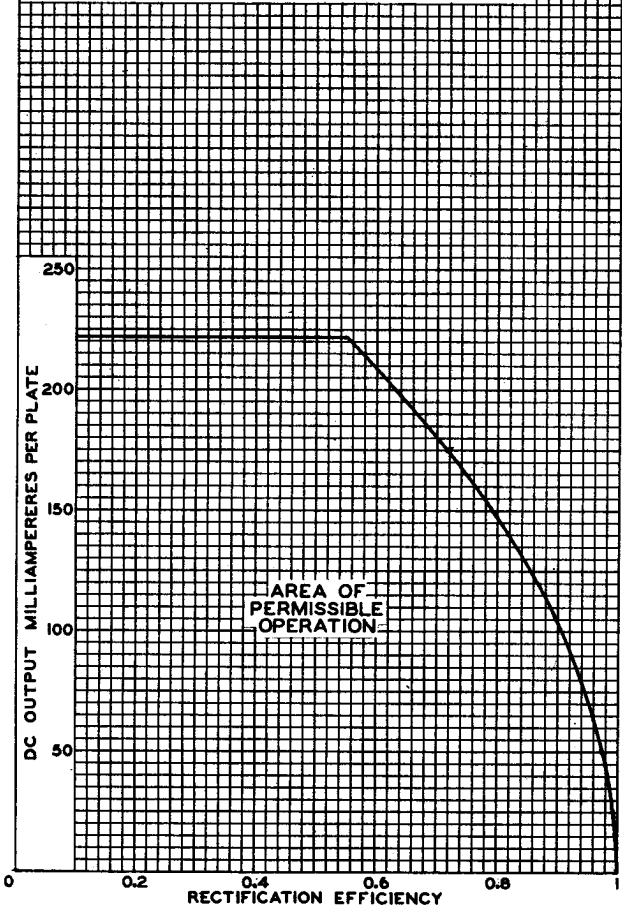
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RATING CHART II CAPACITOR INPUT TO FILTER

$E_f = 5$ VOLTS AC
STEADY-STATE PEAK PLATE CURRENT PER PLATE
(AMPERES) = 1.2

$$\text{RECTIFICATION EFFICIENCY} = \frac{\bar{E}}{\sqrt{2} E_s}$$

WHERE \bar{E} = DC OUTPUT VOLTS AT INPUT TO FILTER
 E_s = AC PLATE SUPPLY VOLTS (RMS) PER PLATE
(WITHOUT LOAD)



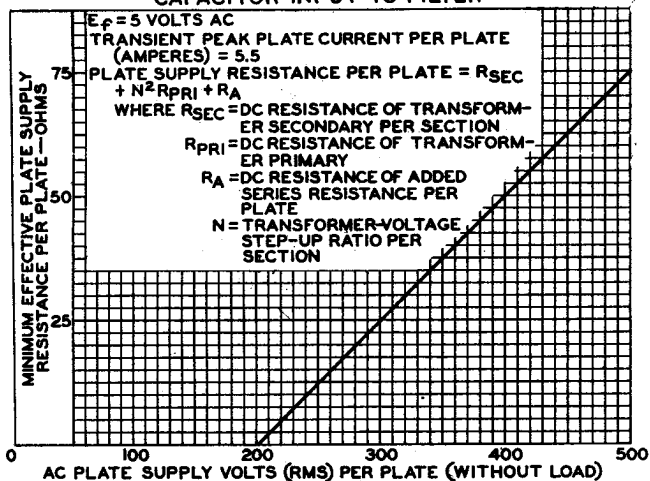
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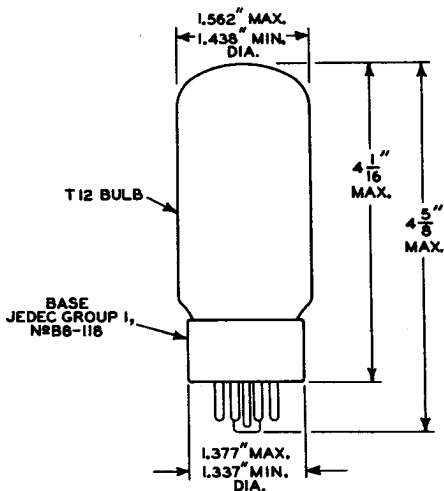
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RATING CHART III

CAPACITOR INPUT TO FILTER



92CS-10212



92CS-10233